

What is claimed is:

1. A rolling-lobe air spring comprising:

a cover;

a roll-off piston;

5 a rolling-lobe flexible member having a first end portion connected to said cover and a second end portion connected to said roll-off piston; and,

a support bell supporting said rolling-lobe flexible member at said first end portion and being rigidly connected to said cover.

2. The rolling-lobe air spring of claim 1, wherein said cover and said support bell are configured as a single integral structure.

3. The rolling-lobe air spring of claim 1, said rolling-lobe flexible member having a maximum diameter; and, said support bell being disposed within said rolling-lobe flexible member and extending from said first end portion over the upper region of  
5 said rolling-lobe flexible member up to approximately said maximum diameter.

4. The rolling-lobe air spring of claim 3, said support bell having a throat region adjacent said cover; said first end portion including an end segment at said throat region; and, a clamp ring applied to said throat region from outside to fixedly  
5 attach said rolling-lobe flexible member at said end segment thereof to said support bell.

5. The rolling-lobe air spring of claim 4, wherein said cover is attached via a joint to a vehicle body and said roll-off piston is attached to a wheel connecting rod.

6. The rolling-lobe air spring of claim 4, wherein said cover is attached to a wheel connecting rod and said roll-off piston is attached via a joint to a vehicle body.

7. The rolling-lobe air spring of claim 1, wherein said support bell has an open end facing away from said cover and toward said roll-off piston and said support bell further having a cylindrical cross section adjacent said cover and said support bell being configured to expand elliptically in cross section toward said open end thereof.

8. The rolling-lobe air spring of claim 1, said rolling-lobe flexible member having a maximum diameter; and, said support bell being disposed outside of said rolling-lobe flexible member and extending from said first end portion over the upper region of said rolling-lobe flexible member up to approximately said maximum diameter.

9. The rolling-lobe air spring of claim 8, said support bell having a throat region adjacent said cover; said first end portion of said rolling-lobe flexible member including an end segment at said throat region; a support ring disposed inside of said rolling-lobe flexible member at the elevation of said throat region; and, said throat region being pressed against said end segment and said support ring to securely fasten said rolling-lobe flexible member at said first end portion thereof.

10. The rolling-lobe air spring of claim 9, wherein said cover is attached via a joint to a vehicle body and said roll-off piston is attached to a wheel connecting rod.

11. The rolling-lobe air spring of claim 9, wherein said cover is attached to a wheel connecting rod and said roll-off piston is attached via a joint to a vehicle body.